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10/056,663	01/24/2002	Harikrushna S. Patel	IBC 001	9825

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EXAMINER

JOO, JOSHUA

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/056,663

Applicant(s)

PATEL ET AL.

Examiner

Joshua Joo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/1/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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1. Claims 1-21 are presented for examination.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted 7/1/2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Claim Objections***

3. Claims 14 and 17 are objected to because of the following informalities:
  - i) As per claim 14, the line "modulated signal is an a 70 Mhz" should be "the modulated signal is a 70 MHz".
  - ii) As per claim 17, the line "across an computer back plane" should be "across a computer back plane".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

4. Claim 20 is rejected under 35 U.S.C. 101 because the invention is not limited to tangible embodiments (e.g., signal). As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 3-5 are rejected under 35 U.S.C. 102(e) as being unpatentable by Rajakarunanayake et al, US Patent #6,810,413 (Rajakarunanayake hereinafter)

7. As per claims 3-5, Rajakarunanayake teaches the invention as claimed including the method and apparatus for transmitting a request through a terrestrial link and transmitting the request through a satellite link. Dillon's teachings comprise of:

a first server receiving first request information (Col 6, lines 36-37. ISP receives request.);

a second server coupled to the first server and generating second request information in response to the first request information received by the first server (Col 6, lines 46-49. NOC generates second request after receiving request from the ISP.), the second server receiving first internet content in response to generating the second request information (Col 6, lines 49-50. NOC receives content.); and

a wireless transmitter coupled to the second server and broadcasting second internet content in response to the first internet content received by the second server (Col 6, lines 51-54. NOC sends response to the satellite and broadcasts the content.).

8. Claim 12 is rejected under 35 U.S.C. 102(e) as being unpatentable by Dillon et al, US Patent #6,115,750 (Dillon hereinafter)

9. As per claim 12, Dillon teaches the invention as claimed including the method and apparatus for transmitting a request through a terrestrial link and transmitting the request through a satellite link. Dillon's teachings comprise of:

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a router receiving a first request (Col 6, lines 10-11. Slip provider receives request.);

a switch coupled to the router and generating second information in response to the first request received by the router (Col 6, lines 12-15. Gateway receives request from slip provider and sends request.);

a proxy farm coupled to the switch and generating internet content information in response to the second information generated by the switch (Col 6, lines 16-17. Application server replies with requested file. Col 14, lines 18-19. Plurality of application servers.);

a gateway coupled to the proxy farm and generating a transport stream in response to the internet content information generated by the proxy farm (Col 6, lines 33-35. Encapsulates packet for satellite transmission. Col 11, lines 17-18. Digital stream.);

a modulator coupled to the gateway and generating a modulated signal in response to the transport stream generated by the gateway (Col 6, lines 39-40. Satellite gateway broadcasts over the satellite link. Modulation is inherent.); and

a transmitter coupled to the modulator and generating an up converted signal in response to the modulated signal generated by the modulator (Col 6, lines 39-40. Satellite gateway broadcasts over the satellite link. Fig 1. #170. Transmitter.).

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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11. Claims 1, 2, 9-11, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rajakarunanayake in view of Killian, US Patent #6,438,592.

12. As per claims 1 and 2, Rajakarunanayake teaches substantially the invention as claimed including the method and system for requesting Internet content through terrestrial connection and receiving the Internet content by satellite transmission. Rajakarunanayake's teachings comprise of:

a system generating request information using a terrestrial forward path including an internet service provider (Col 6, lines 33-37. User requests content over POTS line. Request is sent to the ISP. ); and

a Hub broadcasting requested information back to an end-user using a terrestrial wireless path, in response to the request information (Col 6, lines 53-56. Satellite beams Internet content to the user.).

13. Rajakarunanayake teaches of requesting and receives Internet content Col 6, lines 33-35; Col 6, lines 53-56). However, Rajakarunanayake does not teach of using a dynamic address, the dynamic address changing with each connection to an internet service provider and the requested information containing the dynamic address.

14. Killian teaches of a client being assigned with a dynamic address (Col 18, lines 39-41, 55-57), where the client requests and receives information from the server (Col 8, lines 28-34).

15. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine teachings of Rajakarunanayake and Killian because the teachings of Killian to use dynamic IP addresses would improve the teachings of Rajakarunanayake by providing

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security to the user and providing mobility to the user, allowing the user to connect from various locations.

16. As per claims 9, 10, and 11, Rajakarunanayake teaches substantially the invention as claimed including the method and system for requesting Internet content through terrestrial connection and receiving the Internet content by satellite transmission. Rajakarunanayake's teachings comprise of:

a server receiving IP packets from an end-user through a terrestrial path. (Col 6, lines 33-37. NOC receives request over POTS line.);

the server retrieving internet content in response to the IP packets (Col 6, lines 46-47. Receives Internet content.); and

a transmitter coupled to the server and broadcasting information back to the end-user through a terrestrial wireless path, in response to the internet content retrieved by the server (Col 6, lines 53-53. Satellite broadcasts information.).

17. Rajakarunanayake does not teach the IP packets include dynamic source address information, the dynamic source address information changing with each connection to an internet service provider

18. Killian teaches of a client being assigned with a dynamic address (Col 18, lines 39-41, 55-57), where the client requests and receives information from the server (Col 8, lines 28-34).

19. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine teachings of Rajakarunanayake and Killian because the teachings of Killian to use dynamic IP addresses would improve the teachings of Rajakarunanayake by providing

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security to the user and providing mobility to the user, allowing the user to connect from various locations.

20. As per claims 16 and 19, Rajakarunanayake teaches substantially the invention as claimed including the method and system for requesting Internet content through terrestrial connection and receiving the Internet content by satellite transmission. Rajakarunanayake's teachings comprise of:

a connection interface including a connection interface address and establishing a plurality of connections with a service provider (Col 5, line 33. Subscribers. Col 5, lines 52-53. connects to ISP.),

a wireless interface coupled to the connection interface and receiving a broadcasted signal, the broadcasted signal including the connection interface address and internet content (Col 5, line 34-35. Satellite downlink. Col 5, lines 34-40, 52-53. Receives Internet content from satellite broadcast and transmits to the subscribers),

the wireless interface processing the broadcasted signal and providing the internet content to an end-user in response to the interface address (Col 5, lines 34-40, 52,53. Processes received broadcast and transmits to subscribers.).

21. Rajakarunanayake teaches of requesting and receiving web content (Col 6, lines 33-5, 54-56). However, Rajakarunanayake does not teach of the connection interface receiving a dynamic internet protocol address in response to establishing the plurality of connections with the service provider, wherein the dynamic internet protocol address changes with each of the plurality of connections to the service provider, receiving a broadcasted signal containing the dynamic protocol address, and providing broadcasted information in response to the dynamic internet protocol address.



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22. Killian teaches of a client being assigned with a dynamic address (Col 18, lines 39-41, 55-57), where the client requests and receives information from the server (Col 8, lines 28-34).

23. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine teachings of Rajakarunanayake and Killian because the teachings of Killian to use dynamic IP addresses would improve the teachings of Rajakarunanayake by providing security to the user and providing mobility to the user, allowing the user to connect from various locations.

24. As per claim 17, Rajakarunanayake teaches an end-user system as set forth in claim 16 wherein the connection interface is coupled to the wireless interface across a computer back plane (Col 5, lines 34-35. Server connected to satellite downlink.).

25. As per claim 18, Rajakarunanayake teaches an end-user system as set forth in claim 16 wherein the connection interface is coupled to the wireless interface across a local area network (Fig. 1 #70).

26. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rajakarunanayake in view of Duursma et al, US Publication #2002/010384 (Duursma hereinafter).

27. As per claims 6, 7, and 8, Rajakarunanayake teaches substantially the invention as claimed including the method and system for requesting Internet content through terrestrial

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connection and receiving the Internet content by satellite transmission. Rajakarunanayake's teachings comprise of:

a first server generating first information (Col 6, lines 42-49. Internet content request.);

a second server coupled to the first server (Col 6, lines 42-43. NOC connected to the content server.), the second server generating second information in response to the first information generated by the first server (Col 6, lines 42-49. Stripped Internet content request.); and

a wireless transmitter coupled to the second server and generating third information in response to the second information generated by the second server (Col 6, lines 52-53. Satellite broadcasts Internet content.).

28. Rajakarunanayake does not teach of a first server residing in a first IP address domain and a second server residing in a second IP address domain different from the first IP address domain

29. Durrsma teaches of servers residing on different domains (Paragraph 0035) and communicating with each other (Paragraph 0050).

30. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Rajakarunanayake and Duursma because the teachings of Durrsma to have servers residing on different domains would improve the teachings of Rajakarunanayake by providing network security to the individual servers and increasing the reliability of the system.

31. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dillon in view of Brewer, US Publication #2002/0167918.

32. As per claim 13, Dillon does not teach a Hub as set forth in claim 12, wherein the transport stream is an MPEG-2 compliant transport stream.

33. Brewer teaches of a stream that is MPEG2 transport data stream (Paragraph 0097).

34. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Dillon and Brewer because both teachings deal with the transmission of data through a satellite link. Furthermore, the teachings of Brewer to use a MPEG2 transport stream would improve the teachings of Dillon by providing synchronous data transmission at a high data rate.

35. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dillon in view of Yamaguchi et al, US Patent #4,616,108 (Yamaguchi hereinafter).

36. As per claim 14, Dillon does not teach a Hub as set forth in claim 12, wherein the modulated signal is a 70 Mhz intermediate frequency modulated signal.

37. Yamaguchi teaches of modulated signal that is a 70 Mhz intermediate frequency band (Col 4, lines 53-55).

38. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Dillon and Yamaguchi because both teachings deal with broadcasting over a satellite link. Furthermore, the teachings of Yamaguchi to use a 70 Mhz intermediate frequency modulated signal would improve the teachings of Dillon by further specifying the process of up-linking content for a satellite broadcast.

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39. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dillon in view of Varadan et al, US Patent #6,525,691.

40. As per claim 15, Dillon does not teach a Hub as set forth in claim 12, wherein the up-converted signal is up-converted to between about 5.3 GHZ and 5.8 GHZ.

41. Varadan teaches of up-converting signals between 5.75-6.15 GHZ (Col 11, lines 13-14).

42. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Dillon and Varadan because the teachings of Varadan to up-convert signals to 5.75-6.15 GHZ would improve the teachings of Dillon by specifically specifying a frequency range used to transmit content via satellite link.

43. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rajakarunanayake in view of Brewer.

44. As per claim 20, Rajakarunanayake teaches substantially the invention as claimed including the method and system for requesting Internet content through terrestrial connection and receiving the Internet content by satellite transmission. Rajakarunanayake's teachings comprise of:

generating a modulated signal by down converting the data signal (Col 7, lines 34-35. Satellite downlink receives broadcast.);

checking the media access control address information in response to the modulated signal information (Col 7, lines 36. Layer 2 termination. Col 7, lines 4-5. Ethernet.);

generating a transport stream by demodulating the modulated signal (Col 7, lines 34-35. Receives Internet content signal from satellite downlink. Demodulation is inherent. Col 9, line 14. Streaming data.);

checking the transmission control protocol/internet protocol address information in response to the transport stream information (Col 7, lines 39-40. ISP transmits content to end user.).

45. Rajakarunanayake does not teach of generating Internet content by decompressing the transport stream.

46. Brewer teaches of compressing and decompressing data such as video signals for satellite transmission (Paragraph 0003).

47. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Rajakarunanayake and Brewer because both teachings deal with transmission of data via a satellite link. Furthermore, the teachings of Brewer to decompress data would improve the teachings of Rajakarunanayake because it is required to decompress compressed content for the benefit of efficient transmission.

48. As per claim 21, Rajakarunanayake teaches substantially the invention as claimed including the method and system for requesting Internet content through terrestrial connection and receiving the Internet content by satellite transmission. Rajakarunanayake's teachings comprise of:

first instructions for down converting a wireless signal thereby generating a down converted signal including media access control information (Col 7, lines 34-35. Satellite downlink receives broadcast. Col 7, lines 36. Layer 2 termination.);

second instructions for checking the media access control information, thereby generating a first test information (Col 7, lines 36. Layer 2 termination.);

third instruction for demodulating the down converted signal in response to the first test information, thereby generating a transport stream including a transmission control protocol/internet protocol address (Col 7, lines 34-35. Receives Internet content signal from satellite downlink. Demodulation is inherent. Col 9, line 14. Streaming data.).

fourth instruction for testing the transmission control protocol/internet protocol address thereby generating second test information (Col 7, lines 39-40. ISP transmits content to end user. Col 7, lines 4-5. Ethernet.).

49. Rajakarunanayake does not teach of fifth instructions for decompressing the transport stream in response to the second test information, thereby generating Internet content information.

50. Brewer teaches of compressing and decompressing data such as video signals for satellite transmission (Paragraph 0003).

51. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Rajakarunanayake and Brewer because both teachings deal with transmission of data via a satellite link. Furthermore, the teachings of Brewer to decompress data would improve the teachings of Rajakarunanayake because it is required to decompress compressed content for the benefit of efficient transmission.

### ***Conclusion***

52. A shortened statutory period for reply to this Office action is set to expire THREE

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MONTHS from the mailing date of this action.

53. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Joo whose telephone number is 571 272-3966. The examiner can normally be reached on Monday to Friday 7 to 4.

54. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on 571 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

55. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 7, 2005  
JJ

 JOHN FOLLANSBEE  
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